

34. (New). A database as recited in claim 34 , wherein  
said Graphical User Interface further operates to evaluate said expression in  
order to determine whether access to said at least one record should be granted.

[All pending claims have been reproduced in Appendix A for the convenience of the Examiner]

### **REMARKS**

New Claims 33-34 have been added. Thus, claims 1- 34 are now pending. No claim has been amended, however, all pending claims have been reproduced in Appendix A for the convenience of the Examiner.

In the Office Action, the Examiner rejected claims under 35 U.S.C. §102 and 35 U.S.C. §103. These rejections are fully traversed below.

#### **Patentability of Claims over *Ananda***

In the Office Action, the Examiner rejected claims 1-4, 6-9 and 28-31 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,385,731-B2 (*Ananda*)

The application relates to techniques for controlling access to data stored in records of a database. As such, as a method for controlling access to records stored in a database, claim 1 recites (a) defining at least one expression associated with at least one record of the database, (b) evaluating the at least one expression for the at least one record, and (c) allowing access to the at least one record based on the evaluating of the at least one expression.

In the Office Action, the Examiner has asserted that *Ananda* teaches all the recited features of claim 1. *Ananda* pertains to a secure on-line PC postage metering system. As such, *Ananda* describes a system for providing secure access and execution of application software stored on a first computer by a second computer using a communication device while a communication link is maintained between the first and second computer. This provides a secure software rental system which allows a user to

only execute an application while connected to a central rental facility. In other words, the user is prevented from copying the application or subsequently executing the application after the link to the rental system has been terminated. (*Ananda*, Col. 2, line 49 to Col. 3, lines 9).

It is noted that *Ananda* describes that a password can be transmitted by the user to the central rental facility. Accordingly, a user validation module can compare the password stored in the user registration database for the user in order to determine whether a connection should be established for the user. (*Ananda*, Col. 3, lines 24,34) However, contrary to the Examiner's assertion, this does not teach the recited features of claim 1. This should be evident since the methodology of *Ananda* does not control access to a record in a database. Rather, a password is transmitted by a user and compared to a password that is already stored in order to determine whether a connection should be established. In other words, the recited section of *Ananda* (Col. 3, 18-34) do not teach defining at least one expression associated with at least one record of the database. Instead, the password is associated with a user. It should also be noted that the recited section of *Ananda* does not teach evaluating the at least one expression for the at least one record; or allowing access to the at least one record based on the evaluating of the at least one expression. Moreover, it is respectfully submitted that *Ananda* do not teach these features because the teachings of *Ananda* do not even pertain to a database program. As such, *Ananda* cannot possibly teach defining and evaluating an expression associated with at least one record of the database.

Accordingly, it is respectfully submitted that claim 1 is patentable over *Ananda* for at least these reasons. In addition, claims that are dependent on claim 1 are patentable at least for this reason. Moreover these dependent claims recite additional features which render them patentable for additional reasons. Furthermore, although claim 28 is directed to a computer readable media, it recites similar features as those discussed above with respect to claim 1. Accordingly, it is respectfully submitted that claim 28 and its dependent claims are patentable over *Ananda*. Still furthermore, it is respectfully submitted that claim 11 and its dependent claims are patentable because claim 11, among other things recites defining a calculation expression and evaluating the calculation expression in context of a controlling access to records stored in a database.

### **Patentability of Claims over *Balint et al.***

In the Office Action, the Examiner rejected claims 16-27 under 35 U.S.C. §102 (b) as being anticipated by U.S. Patent Application No. 5,542,024 (*Balint et al.*)

Claim 16 pertains to a database system having one or more records stored therein. The database system includes a database program which, in turn, includes a Graphical User Interface that can be used to facilitate operations on the records stored in the database. It should also be noted that the Graphical User Interface operates to facilitate defining access privileges with respect to the records stored in the database.

*Balint et al.* pertains to a system tool which provides a graphical interface that can be used by an expert (a non-computer literate expert) to represent his or her knowledge and thought processes. The expert can enter his or her knowledge in a non-binary decision format, i.e., in a series of interconnected nodes, wherein each node is capable of multiple entry points and multiple exit points. Furthermore, each node can be stored as a separate database record which can subsequently be presented to a non-expert user. (*Balint et al.*, Abstract, and Col. 2, lines 44, 54)

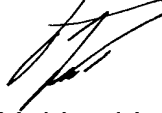
It is noted that *Balint et al.* describes that the a expert (or a developer) or a user (non- expert) may be asked, at step 102 of the flow chart depicted in Fig. 18 (a), to enter a password before entering into an application. It is further noted that access to a data record can be granted based on whether the entered password is correct. (*Balint et al.*, Col. 22, page 26-46). However, similar to *Ananda*, *Balint et al.* teaches comparing an entered password to another password which is stored. This does not, however, teach a Graphical User Interface which operates to facilitate defining access privileges with respect to the records stored in the database. Instead, a password is associated with a user and access is determined based on this password. Claim 16, among other things, recites that the Graphical User Interface operates to facilitate defining access privileges with respect to one or more records stored in the database. Thus, it is respectfully submitted that claim 16 and its dependent claims are patentable over *Balint et al.* for at least this reason alone.

### Summary

Based on the foregoing, it is submitted that all pending claims are patentably distinct over the cited art of record. Additional limitations recited in the independent claims or the dependent claims are not further discussed as the limitations discussed above are sufficient to distinguish the claimed invention from the cited art. Accordingly, it is respectfully requested that the Examiner withdraw all the rejections to the claims.

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,  
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## **APPENDIX A**

1. A method of controlling access to records stored in a database, said method comprising:

defining at least one expression associated with at least one record of said database;

evaluating said at least one expression for said at least one record; and

allowing access to said at least one record based on said evaluating of said at least one expression.

2. A method as recited in claim 1, wherein said at least one expression is a calculation expression that can be evaluated at least partly based on a value of at least one field of said at least one record.

3. A method as recited in claim 1, wherein said at least one expression is a calculation expression that can be evaluated at least partly based on at least one state variable of said database.

4. A method as recited in claim 1,

wherein said at least one expression can be defined based on fields and state variables of said database, and

wherein said evaluating operates to return only one of two possible values, one of said possible values indicating that access to said at least one record should be granted, and the other one of said possible values indicating that access to said at least one record should be denied.

5. A method as recited in claim 1, wherein said evaluation is performed only when a request to access said at least one record has been received.

6. A method as recited in claim 1, wherein said defining of said at least one expression defines access privileges for a user of said database with respect to accessing one or more records of said database.

7. A method as recited in claim 1, wherein said defining of said at least one expression operates to define access privileges for a user of said database with respect to at least one operation that can be performed on one or more records of said database.

8. A method as recited in claim 1,

wherein said defining of said expression defines access privileges for at least one user of said database with respect to access to one or more records in said database, and

wherein said defining of said expression operates to define access privileges with respect to at least one operation that may be requested to be performed by said at least one user on one or more records of said database.

9. A method as recited in claim 8, wherein said at least one user is assigned a password that is associated with said expression.

10. A method as recited in claim 1, wherein access to said at least one record can be for browsing, editing, or deleting of said at least one record.

11. A method of controlling access to records stored in a database, said method comprising:

identifying a password that is associated with one or more users of said database;

defining a calculation expression for said identified password, said calculation expression defining access privileges of said one or more users with respect to at least

one operation that may be requested to be performed by said one or more users on one or more records of said database;

receiving a request to perform said at least one operation on one or more records of said database, said request being identified as a request made by said one or more users associated with said password;

evaluating said calculation expression when said request has been received; said evaluation returning only one of two possible values, one of said possible values indicating that said at least one operation should be granted and another one of said possible values indicating that said at least one operation should be denied;

granting said at least one operation to be performed when said evaluation returns one said possible value to indicate that said at least one operation should be granted; and

denying said at least one operation to be performed when said evaluation returns one said another possible value to indicate that said at least one operation should be denied.

12. A method as recited in claim 11, wherein said at least one operation can be a browse, an edit, or a delete operation.

13. A method as recited in claim 11, wherein said calculation expression is not explicitly defined for said at least one operation but said calculation expression is one that has been defined for another operation which has been considered as a related operation to said at least one operation.

14. A method as recited in claim 11,

wherein said calculation expression can be evaluated at least partly based on a value of at least one field of said at least one record, and

wherein said calculation expression can be evaluated at least partly based on at least one state variable of said database.

15. A method as recited in claim 14, wherein said method further comprises:

granting temporary or limited access to said at least one record to allow said evaluating of said calculation expression.

16. A database system, said database system comprising:

a database having one or more records stored therein;

a database program including a Graphical User Interface that can be used to facilitate operations on said one or more records stored in said database; and

wherein said Graphical User Interface operates to facilitate defining access privileges with respect to said one or more records stored in said database.

17. A database system as recited in claim 16, wherein said Graphical User Interface operates to provide the ability for a user of said database to define an expression associated with at least one operation that may be requested to be performed by another user of said database on said one or more records stored in said database.

18. A database system as recited in claim 16, wherein said Graphical User Interface operates to provide the ability for a user to define said expression without requiring said user to write a programming script.

19. A database system as recited in claim 16,



wherein said Graphical User Interface provides a window that allows a user to interact with said Graphical User Interface to identify a password for which access privileges may be defined or re-defined.

20. A database system as recited in claim 19, wherein said Graphical User Interface further provides a window that allows a user to specify a calculation expression which defines access privileges with respect to at least one operation that may be requested to be performed on said one or more records.

21. A database system as recited in claim 20, wherein said at least one operation can be a browse, edit, or a delete operation.

22. A database system as recited in claim 20,

wherein said calculation expression can be evaluated at least partly based on a value in at least one field of said one or more records of said database, and

wherein said calculation expression can be evaluated at least partly based on at least one state variable of said database.

23. A database system as recited in claim 16, wherein said database program operates to determine whether access to at least one of said one or more records should be granted or denied.

24. A database system as recited in claim 23, wherein said determining of whether access to said at least one record should be granted or denied is performed by evaluating a calculation expression for said at least one of said one record.

25. A database system as recited in claim 24,

wherein access to said at least one record is granted only when said determining determines that access should be granted, and

wherein access to said at least one record is denied when said determining determines that access should be denied for said record.

26. A database system as recited in claim 24, wherein said access to said at least one record can be for browsing, editing, or deleting of said record.

27. A database system as recited in claim 24,

wherein said database system further comprises a cache, and

wherein said cache operates to store an evaluated result of at least one calculation expression.

28. A computer readable medium including computer program code for controlling access to records stored in a database, said computer readable medium comprising:

computer program code for defining at least one expression associated with at least one record of said database;

computer program code for evaluating said at least one expression for said at least one record; and

computer program code for allowing or denying access to said at least one record based on said evaluating of said at least one expression.

29. A computer readable medium as recited in claim 28,

wherein said at least one expression can be defined based on fields and state variables of said database, and

wherein said evaluating operates to return only one of two possible values, one of said possible values indicating that access should be granted and another one of said possible values indicating that access should be denied.

30. A computer readable medium as recited in claim 28,

wherein said defining of said expression is made to define access privileges of at least one user of said database with respect to access to one or more records of said database, and

wherein said defining of said expression operates to define access privileges with respect to at least one operation that may be requested to be performed by said at least one user on one or more records of said database.

31. A computer readable medium as recited in claim 28, wherein said at least one user is assigned a password that is associated with said expression.

32. A computer readable medium as recited in claim 28, wherein access to said at least one record can be for browsing, editing, or deleting of said at least one record.

33. (New). A database system, said database system comprising:

a database having one or more records stored therein;

a database program including a Graphical User Interface that can be used to facilitate operations on said one or more records stored in said database; and

wherein said Graphical User Interface operates to facilitate defining access privileges based on an expression which is defined for at least one record, said expression defining access for said at least one record and said record being stored or created in said database.

34. (New). A database as recited in claim 34 , wherein

said Graphical User Interface further operates to evaluate said expression in order to determine whether access to said at least one record should be granted.